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<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/668,498	YANAGIDA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Hoan H. Tran	2852	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

- 1. ☒ This communication is responsive to amendment filed 12/07/2005.
  - 2. ☒ The allowed claim(s) is/are 1-42.
  - 3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
    - 1. ☒ Certified copies of the priority documents have been received.
    - 2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    - 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
- \* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

- 4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  - 5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
- 6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li>1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)</li> <li>2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br/>Paper No./Mail Date <u>11/05</u></li> <li>4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material</li> </ul> | <ul style="list-style-type: none"> <li>5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)</li> <li>6. <input type="checkbox"/> Interview Summary (PTO-413),<br/>Paper No./Mail Date _____.</li> <li>7. <input type="checkbox"/> Examiner's Amendment/Comment</li> <li>8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance</li> <li>9. <input type="checkbox"/> Other _____.</li> </ul> |
|--|--|

## DETAILED ACTION

### *Allowable Subject Matter*

1. Claims 1-42 are allowed.
2. The following is an examiner's statement of reasons for allowance:

#### Claims 1 and 3-5

None of the prior art of record teaches or suggests a cleaning unit comprising a cleaning blade that cleans a surface of a photosensitive drum, wherein when a sine-wave vibration of 10 Hz is applied to the cleaning blade, a peak temperature of a loss tangent  $\tan\delta$  is in a range of  $-1^{\circ}\text{C}$  to  $-30^{\circ}\text{C}$ .

#### Claim 2

None of the prior art of record teaches or suggests a cleaning unit comprising a cleaning blade that cleans a surface of a photosensitive drum, wherein when a sine-wave vibration of 10 Hz is applied to the cleaning blade, a peak temperature of a loss tangent  $\tan\delta$  is in a range of  $2^{\circ}\text{C}$  to  $-30^{\circ}\text{C}$ , and a temperature-dependent change of the loss tangent  $\tan\delta$  in a temperature range of  $10^{\circ}\text{C}$  to  $40^{\circ}\text{C}$  is in a range of  $0.001/^{\circ}\text{C}$  to  $0.020/^{\circ}\text{C}$ .

#### Claims 6 and 8-10

None of the prior art of record teaches or suggests a process cartridge comprising a cleaning unit including a cleaning blade that cleans a surface of a photosensitive drum, wherein when a sine-wave vibration of 10 Hz is applied to the cleaning blade, a peak temperature of a loss tangent  $\tan\delta$  is in a range of  $-1^{\circ}\text{C}$  to  $-30^{\circ}\text{C}$ .

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Claim 7

None of the prior art of record teaches or suggests a process cartridge comprising a cleaning unit including a cleaning blade that cleans a surface of a photosensitive drum, wherein when a sine-wave vibration of 10 Hz is applied to the cleaning blade, a peak temperature of a loss tangent  $\tan\delta$  is in a range of  $2^{\circ}\text{C}$  to  $-30^{\circ}\text{C}$ , and a temperature-dependent change of the loss tangent  $\tan\delta$  in a temperature range of  $10^{\circ}\text{C}$  to  $40^{\circ}\text{C}$  is in a range of  $0.001/^{\circ}\text{C}$  to  $0.020/^{\circ}\text{C}$ .

Claims 11 and 13-22

None of the prior art of record teaches or suggests an image forming apparatus comprising a cleaning unit including a cleaning blade that cleans a surface of a photosensitive drum, wherein when a sine-wave vibration of 10 Hz is applied to the cleaning blade, a peak temperature of a loss tangent  $\tan\delta$  is in a range of  $-1^{\circ}\text{C}$  to  $-30^{\circ}\text{C}$ .

Claim 12

None of the prior art of record teaches or suggests an image forming apparatus comprising a cleaning unit including a cleaning blade that cleans a surface of a photosensitive drum, wherein when a sine-wave vibration of 10 Hz is applied to the cleaning blade, a peak temperature of a loss tangent  $\tan\delta$  is in a range of  $2^{\circ}\text{C}$  to  $-30^{\circ}\text{C}$ , and a temperature-dependent change of the loss tangent  $\tan\delta$  in a temperature range of  $10^{\circ}\text{C}$  to  $40^{\circ}\text{C}$  is in a range of  $0.001/^{\circ}\text{C}$  to  $0.020/^{\circ}\text{C}$ .

Claims 23-27

None of the prior art of record teaches or suggests a cleaning unit comprising a cleaning blade that cleans a surface of a photosensitive drum, wherein an impact resilience of the cleaning

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blade at 10<sup>0</sup>C is equal to or more than 35 percent, and a rate of change of the impact resilience in a temperature range of 10<sup>0</sup>C to 40<sup>0</sup>C is equal to or less than 1.4/<sup>0</sup>C.

Claims 28-32

None of the prior art of record teaches or suggests a process cartridge comprising a cleaning unit including a cleaning blade that cleans a surface of a photosensitive drum, wherein an impact resilience of the cleaning blade at 10<sup>0</sup>C is equal to or more than 35 percent, and a rate of change of the impact resilience in a temperature range of 10<sup>0</sup>C to 40<sup>0</sup>C is equal to or less than 1.4/<sup>0</sup>C.

Claims 33-42

None of the prior art of record teaches or suggests an image forming apparatus comprising a cleaning unit including a cleaning blade that cleans a surface of a photosensitive drum, wherein an impact resilience of the cleaning blade at 10<sup>0</sup>C is equal to or more than 35 percent, and a rate of change of the impact resilience in a temperature range of 10<sup>0</sup>C to 40<sup>0</sup>C is equal to or less than 1.4/<sup>0</sup>C.

***Prior Art***

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- Morimoto et al. [5,521,691] disclose a cleaning device.
- Itami et al. [6,403,270] disclose a cleaning device.
- Muto et al. [6,694,122] disclose a cleaning device.
- Matsudaira et al. [6,701,123] disclose a cleaning device.

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***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoan H. Tran whose telephone number is (571) 272-2141. The examiner can normally be reached from 8:30 AM - 5:00 PM Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Arthur Grimley can be reached at (571) 272-2136. The central office fax number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

HHT  
Feb. 20, 2006



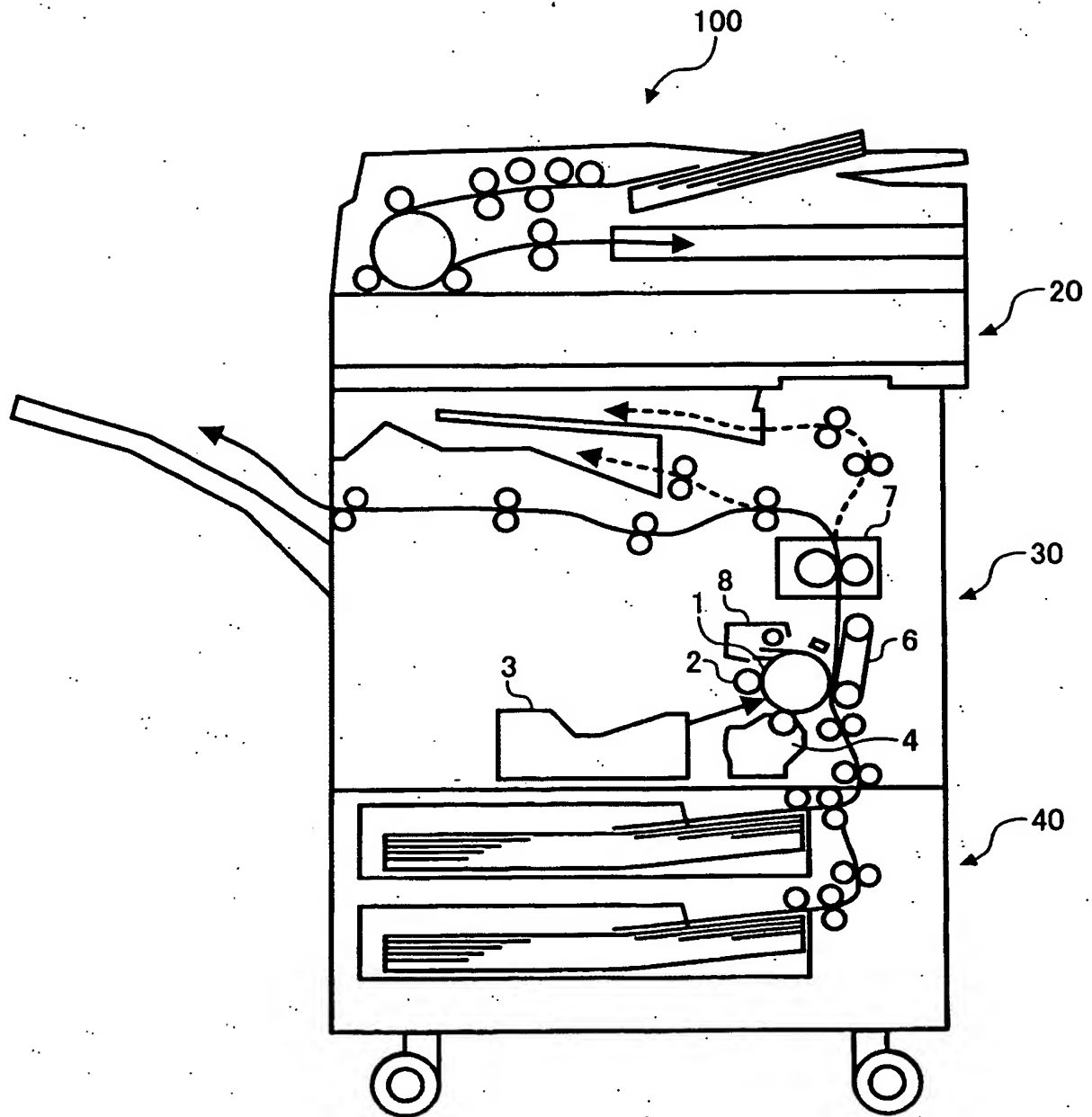
**HOAN TRAN  
PRIMARY EXAMINER**



Serial No: 10/668,498  
Reply to Office Action  
dated: September 22, 2005  
New Drawings

Approved  
66  
ozlulbc

FIG. 1



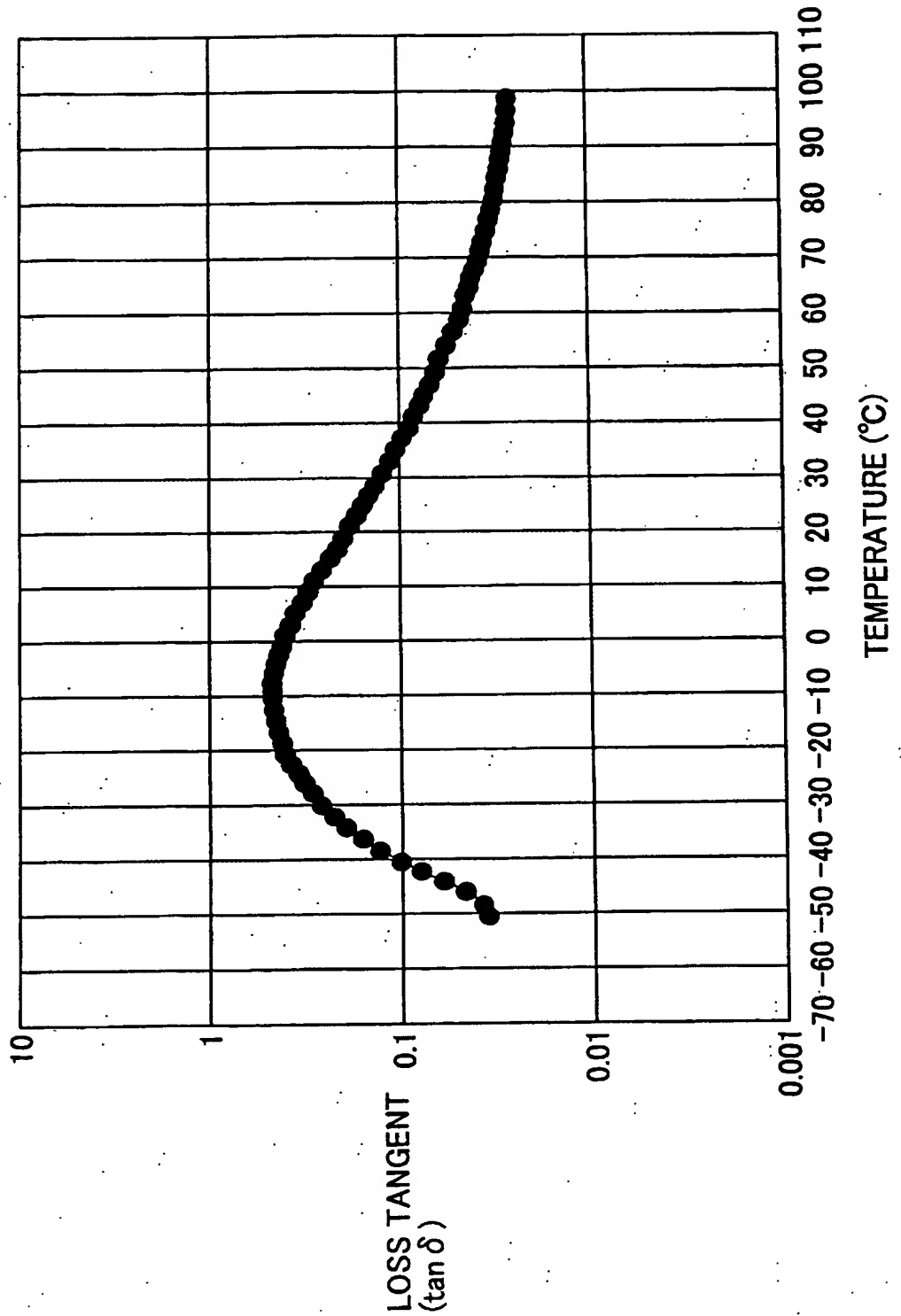
Approved  
us  
a21266

The diagram illustrates a mechanical device with several key parts:

- Central Component (8d):** A large circular disk or rotor with a central hub, featuring a curved arrow to indicate clockwise rotation.
- Left Mechanism (2a, 2b):** A lever-like assembly with a pivot point (2a) and a shaded rectangular component (2b).
- Top Mechanism (8c, 8e):** A complex arrangement involving springs and a cylindrical part (8c) mounted on a base (8e).
- Belt Drive System (6a, 6b, 6c):** Located on the right, it includes a pulley (11) at the top and three rollers/wheels (6a, 6b, 6c) below it, connected by a belt.
- Bottom Components (4, 1):** Two small wheels (4) positioned near the base (1) of the central disk.
- Other Labels:**
  - 9:** A vertical shaft or rod extending upwards from the left mechanism.
  - 11:** A pulley or roller at the top right.
  - 3a:** A dashed line pointing from the bottom left corner towards the central assembly.

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02/14/06

FIG. 3





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02/24/06

FIG. 4

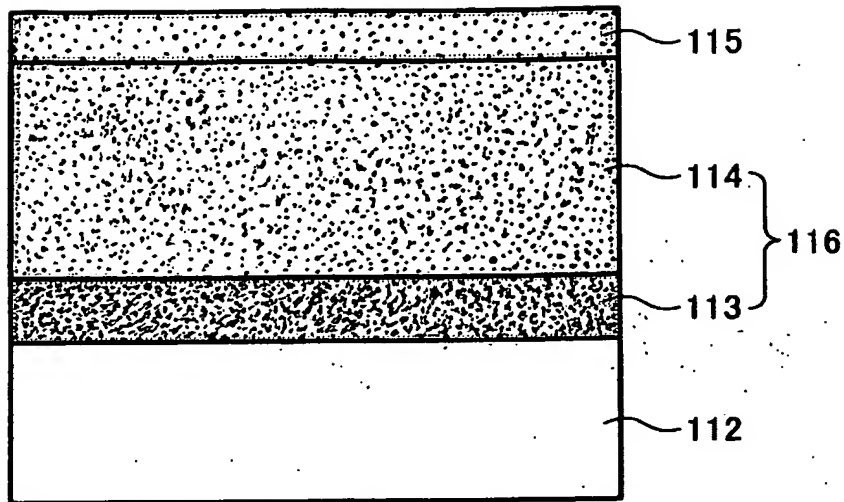
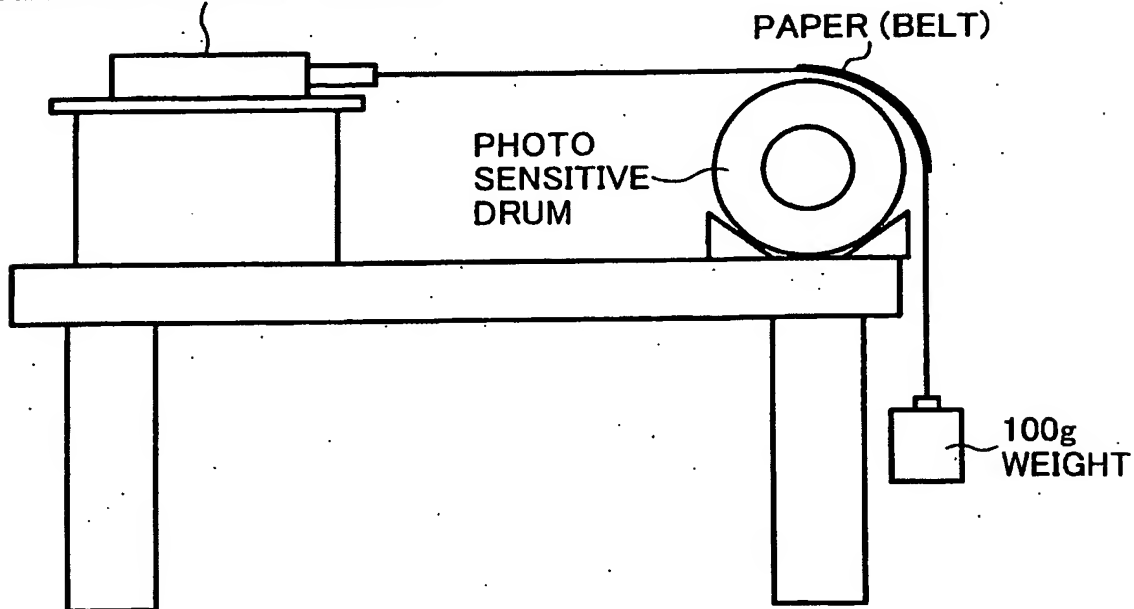


FIG. 5

DIGITAL PUSH-PULL GAUGE



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for  
release

FIG. 6A

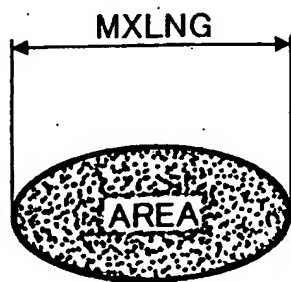


FIG. 6B

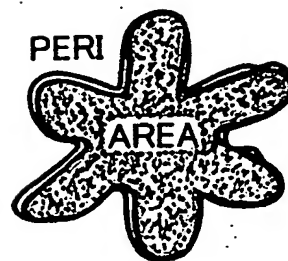


FIG. 7A

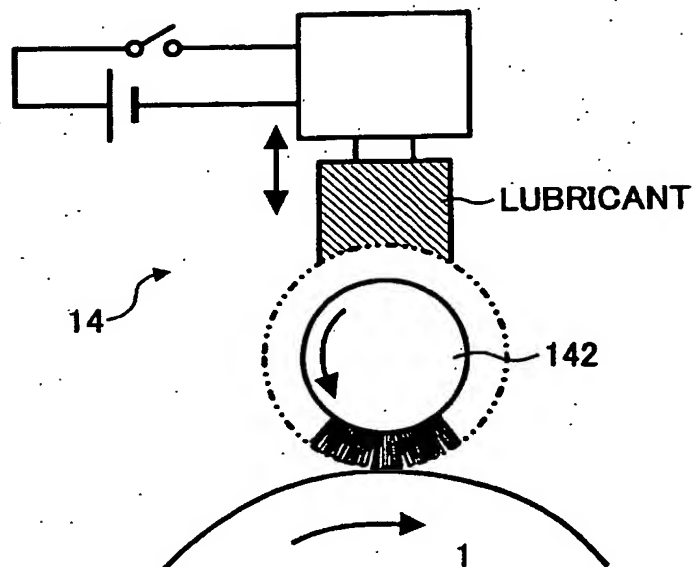
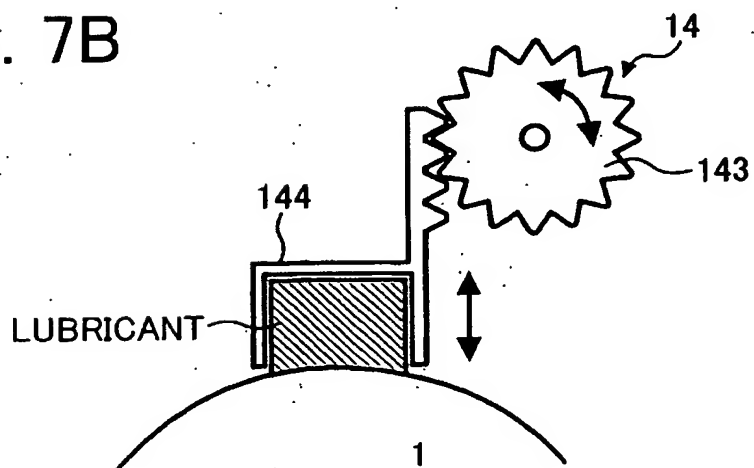


FIG. 7B



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US  
or 1/1/00

Fig. 1 is a schematic diagram of a mechanical assembly, likely a pump or motor. The central component is a large circular disk (8a) with a central hub (8b) and a smaller circular feature (8d). This disk is connected to a drive shaft (1) and a belt (6a). The assembly is mounted on a base (1) and includes various structural components (2a, 2b, 3a, 4, 8b, 8d, 8e, 11). A spring (8c) is shown connected to a lever (9). The diagram illustrates the mechanical linkage and drive mechanism of the device.

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02/21/06

FIG. 9

